Clarion

Service Manual

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"Clarion Service Manual"

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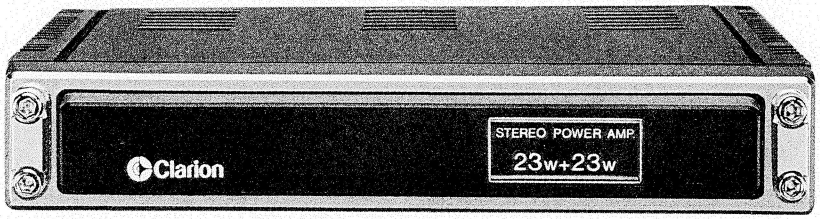
Model GA-311C



■SPECIFICATIONS:

Maximum output:	23W×2
Quieting output:	15W×2
	(at 1kHz 10% distortion)
S/N ratio:	60dB
Input impedance:	30kΩ
Input sensitivity:	100mV
	(at quieting output)
Load impedance:	4Ω×2
Power supply voltage:	DC14V (10.8V to 15.6V)
	Negative ground
Current consumption:	Less than 4A
	(at Max. output)
Semiconductors:	4 ICs, 3 transistors and
	11 diodes
Dimensions:	Width 140mm
	Height 25mm
	Depth 100mm
Weight:	580g

■COMPONENTS:

GA-311C-51

	Main unit	1
300-5946-00	Mounting bracket	1
300-5946-01	Mounting bracket	1
852-5115-00	Extension lead	1
921-7007-00	Parts bag	1
700-5016-10	Tap screw (M5x16)	2
725-0181-00	Plate nut	2
734-5010-31	D-sems hex-bolt (M5x10)	3
740-5000-10	Flat washer	2
348-0105-00	Magic tape	2
348-0106-00	Magic tape	2

■CAUTION:

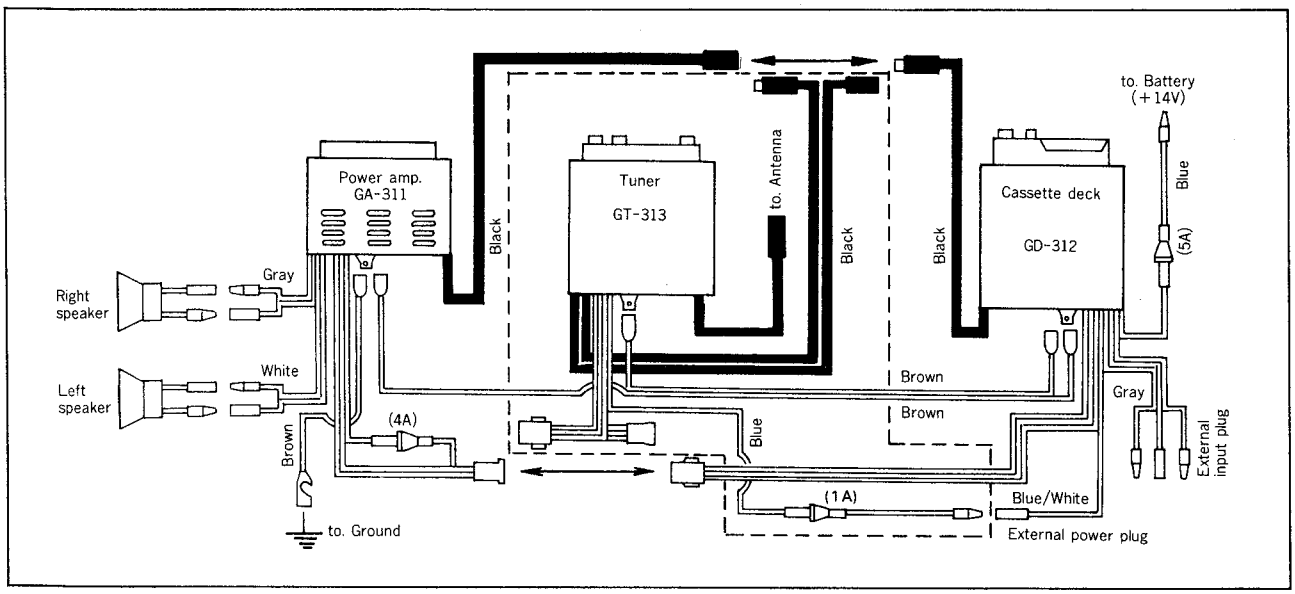
- USE UNGROUNDED SPEAKERS ONLY.
- EACH SPEAKER LEAD MUST BE USE EACH CHANNEL AND DO NOT GROUND.

■FEATURES:

- BUILT IN NOISE REDUCTION.
- BUILT IN AUTOMATIC CIRCUIT PROTECTION.

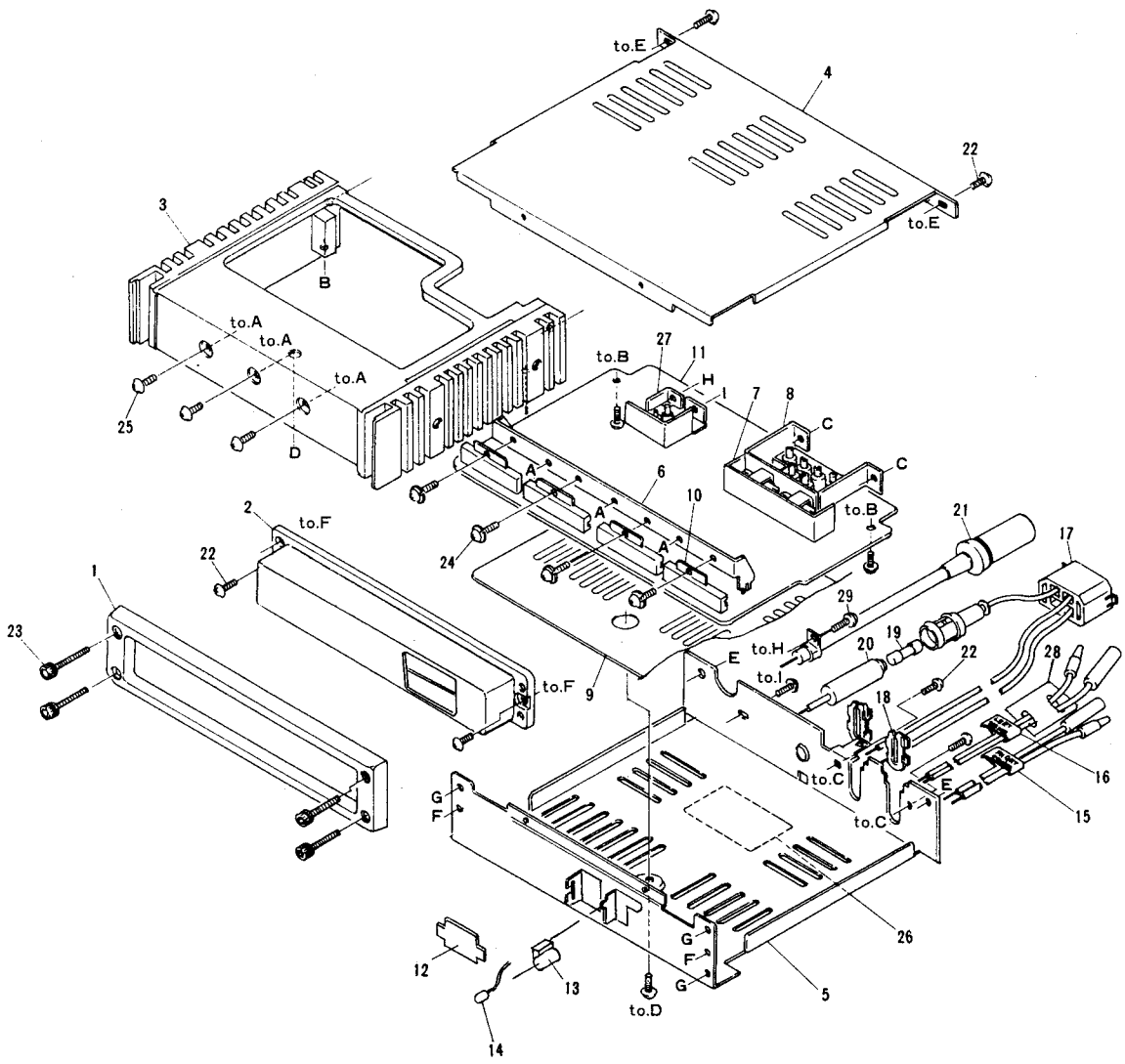
Printed in Japan 298-2629-00 GA-311C

■WIRE CONNECTION:



■EXPLODED VIEW:

◎Main section



■PARTS LIST:

◎Main section

REF.NO.	PART NO. (ORDER NO.)	DESCRIPTION	Q'TY
1	370-3338-01	Escutcheon	1
2	940-2561-03	Escutcheon ass'y	1
3	313-1065-02	Heat sink	1
4	310-0973-06	Upper case	1
5	311-0975-05	Lower case	1
6	330-6784-00	IC support	1
7	330-6783-00	Shade plate	1
8	944-0541-00	Filter ass'y	1
9	347-0845-01	Insulator paper	1
10	051-0256-02	IC (TA7217AP)	4
11	099-5923-01	P.W.B	1
12	099-5929-00	P.W.B	1
13	345-3087-04	P.L holder	1
14	017-0337-01	Pilot lamp (ILLUMI)	1
15	851-2260-01	Speaker lead (R)	1

REF.NO.	PART NO. (ORDER NO.)	DESCRIPTION	Q'TY
16	851-2260-00	Speaker lead (L)	1
17	852-6036-01	Extension lead	1
18	335-0580-00	Lead holder	2
19	120-0040-00	Fuse (4A)	1
20	850-2031-01	A-lead	1
21	852-6041-01	Extension lead (DIN)	1
22	731-3006-80	Tap tight (M3x6)	10
23	716-0339-01	Ornamental screw	4
24	714-3004-80	Machine screw (M3x4)	4
25	714-3010-80	Machine screw (M3x10)	3
26	286-3678-00	Set plate	1
27	944-0555-00	Filter ass'y	1
28	285-0838-01	Guide label	1
29	731-3005-80	Tap tight (M3x5)	1

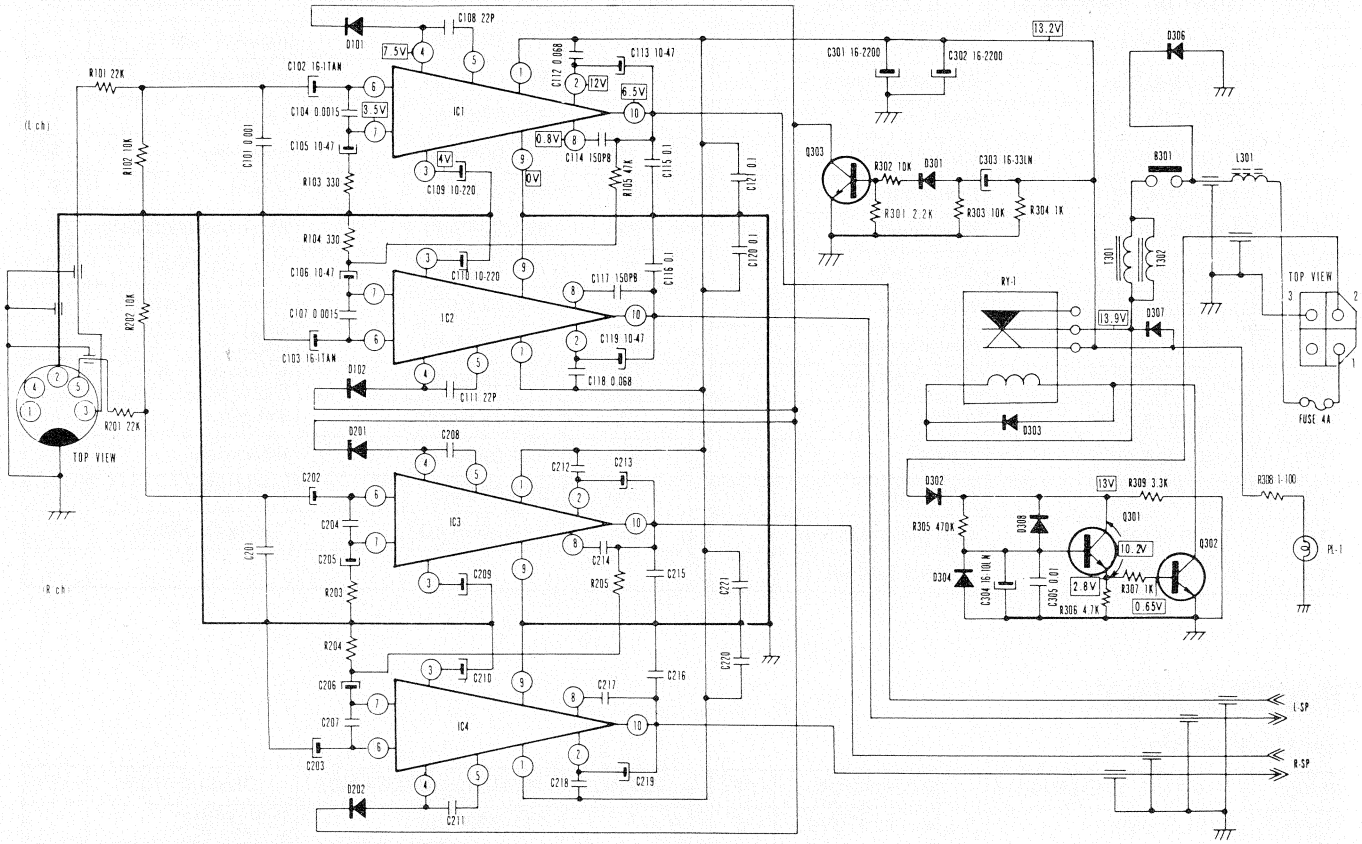
■PARTS LIST:

◎Electrical section

REF.NO.	PART NO. (ORDER NO.)	DESCRIPTION	Q'TY
$D^{101,102,201,202}_{301,308}$	001-0110-03	Diode (1S2473VE)	6
$D^{302,303,304,306}_{307}$	001-0190-01	Diode (1SR34-100VL)	5
$T_{301,302}$	009-0621-00	Choke	2
L_{301}	010-1656-00	Coil	1
RY_1	014-0468-00	Relay (G2K-3-5A)	1
$C_{102,103,202,203}$	042-0239-00	Electrolytic capacitor (16V1μF TAN)	4
$C_{301,302}$	042-0246-01	Electrolytic capacitor (16V2200μF)	2
$IC_{1,2,3,4}$	051-0256-02	IC (TA7217AP)	4
B_{301}	060-0049-01	Braker	1
$Q_{301,303}$	102-1815-25	Transistor (2SC1815Y)	2
Q_{302}	102-2655-15	Transistor (2SC2655-O)	1
R_{307}	111-1021-11	Film resistor (⅛W1kΩ)	1
R_{304}	111-1021-22	Film resistor (¼Ws1kΩ)	1
$R_{201,202,302}$	111-1031-11	Film resistor (⅛W10kΩ)	3
R_{303}	111-1031-22	Film resistor (¼Ws10kΩ)	1
R_{301}	111-2221-22	Film resistor (¼Ws2.2kΩ)	1
$R_{101,201}$	111-2231-11	Film resistor (⅛W22kΩ)	2
$R_{103,104,203,204}$	111-3311-11	Film resistor (⅛W330Ω)	4

REF.NO.	PART NO. (ORDER NO.)	DESCRIPTION	Q'TY
R_{309}	111-3321-22	Film resistor (¼Ws3.3kΩ)	1
R_{306}	111-4721-11	Film resistor (⅛W4.7kΩ)	1
$R_{105,205}$	111-4731-11	Film resistor (⅛W47kΩ)	2
R_{305}	111-4741-11	Film resistor (⅛W470kΩ)	1
R_{308}	114-1011-51	Film resistor (1W100Ω)	1
$C_{101,201}$	141-1022-10	Polyester capacitor (50V0.001μF)	2
C_{305}	141-1032-10	Polyester capacitor (50V0.01μF)	1
$C_{104,107,204,207}$	141-1522-10	Polyester capacitor (50V0.0015μF)	4
$C_{112,118,212,218}$	141-6832-12	Polyester capacitor (50V0.068μF)	4
$C_{114,117,214,217}$	160-1512-05	Ceramic capacitor (150pFB)	4
$C_{115,116,120,121}$	173-1042-12	Ceramic capacitor (50V0.1μF)	4
$C_{108,111,208,211}$	174-2209-13	Ceramic capacitor (22pFCH)	4
C_{210}	179-2273-22	Electrolytic capacitor (10V220μF)	1
$C_{109,110,209}$	180-2274-22	Electrolytic capacitor (10V220μF)	3
$C_{119,219}$	180-4764-22	Electrolytic capacitor (10V47μF)	2
C_{304}	181-1063-32	Electrolytic capacitor (16V10μF LN)	1
C_{303}	181-3363-32	Electrolytic capacitor (16V33μF LN)	1
$C^{105,106,113,205}_{206,213}$	182-4763-22	Electrolytic capacitor (10V47μF)	6

■CIRCUIT DIAGRAM:



■PRINTED WIRING BOARD:

No.	Description
1	Power supply
2	Auto supply
3	Earth

No.	Description
1	
2	Earth
3	Input (L)
4	
5	Input (R)